Eligibility

Q: For low-rise multifamily buildings, can we not use Energy Star for Homes?

A: ENERGY STAR Certified Homes may continue to be used for low-rise multifamily buildings until the transition to the new specification is complete. We estimate this to occur by January 2020. At that time, the new eligibility rules would apply and low-rise multifamily buildings would be served by the new multifamily program. The goal of this specification is to improve on the requirements to better fit all multifamily properties.

Townhouses

Comment: Clarifying the definitions of townhouses would be helpful. We see a lot of buildings that are town house style, but have regular apartments peppered into the building.

A: Per 2015 IBC, a townhouse is "a single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides." When determining eligibility, ENERGY STAR intends to leverage existing code definitions.

Q: How would a large multi-building project with multiple building types (Stacked flats and townhomes on the same site) be handled? Does that take two apps or is there a pathway to all in one? What will be the program and Application for this project with both types?

A: We understand some <u>building</u> configurations result in multiple attached "townhouses" that are in fact 1 to 3 stacked dwelling units, but appear like townhouses from the exterior. Those stacked units don't <u>currently</u> meet the proposed SF definition, but this <u>building</u> configuration is something we will look into to determine whether those stacked units would fall under MF or SF. The goal of the new program is to try and make the MF process as similar to SF, so even if they end up being "MF", the process should remain similar to Homes.

We also understand that some <u>project</u> configurations can contain multiple <u>buildings</u> on one project site, where some buildings have units that are entirely eligible for SF and some buildings have units that are entirely eligible for MF. In this scenario, each <u>building</u> would follow the specific ES program for which they are eligible. Again, the goal of the new program is to try and make the MF process as similar to SF, so we can minimize the issues that can raise.

Assisted living facilities

Q: Why aren't assisted living facilities allowed through this program?

A: This particular restriction is still under review for the new specification. Historically, there had been a rigid eligibility line between the ENERGY STAR certification for existing buildings and the new construction certification. Since assisted living facilities could get a score in Portfolio Manager, they were not eligible for new construction. Since the availability of an ENERGY STAR score for multifamily

buildings in 2014, there is now overlap between the building types eligible for the new construction and existing buildings certifications. In addition, any unit that is an SRO (single room occupancy) is not currently eligible for a HERS Index and therefore is also not eligible for the Certified Homes program. This is also under review, pending potential changes to the scope of the RESNET Standards.

Reference Design

Q: Why would the ES reference home use a less-than-federal minimum EF electric water heater for tanks over 50 gallons? Federal minimum is a HPWH for over 50 gals

A: This will be reviewed. While the assumption was that most MF do not typically install larger than 50 gallon storage tanks, we will review to determine whether those size systems should be compared to a HPWH in the Reference Design.

Q: What do you mean by all ducts and air handlers need to be "modeled" within conditioned space? Just that load calcs need to be done?

A: When using modeling to compare your design to the ENERGY STAR Reference Design, the latter will model all ducts and air handlers as being in conditioned space. This is not a requirement of your proposed design, just what you will be compared to. Separately, yes, load calcs would still need to be done in most situations, with some adjustments from how they are done now.

Performance Target

Q: So whereas the ASHRAE approach will be based on the state-level code, the HERS approach will be static?

A: The HERS approach would be updated as needed (as is currently) to advance when state codes advance.

Q: For ASHRAE modeling, is there an option to create a residential only model if the commercial and non-residential spaces are greater than 20% of the floor area?

A: The proposal is that commercial space may be excluded or included as is the case in the MFHR program now. However, all residential-associated common space (e.g., corridors, stairways, lobbies, etc.) must be included.

Mandatory Measures- Envelope

Q: Will compartmentalization requirements have similar allowances for small units as duct leakage has?

A: The proposed compartmentalization requirement is a max allowance of 0.30 CFM50/ft2, regardless of the size of the apartment. This is the same metric being used in LEED, ASHRAE 62.2, and has been used in the MFHR program for many years. Our current proposal would not create a separate limit for small units, as we have done for duct leakage. Since this is based on the square footage of the entire 6-sided

enclosure of the apartment, smaller apartments will get a smaller allowance and larger apartments will get a larger allowance, as that directly correlates to the surfaces needing air-sealing.

Q: How will infiltration be handled in taller buildings?

A: The only proposed test required is the compartmentalization test, which is conducted on a sample of individual dwelling units, not the entire building.

Q: Is continuous insulation a mandatory measure for reduced thermal bridging, or is it a part of the reference design?

A: Reducing thermal bridging is a mandatory measure being proposed for all MF in CZ 3-8. It is not limited to the Reference Design. It is also not limited to continuous insulation – insulated siding, SIPs, ICF's, and double-wall framing would also qualify as meeting the proposed requirement.

Mandatory Measures- HVAC & Distribution

Q: When you say mini splits do you mean ductless units only?

A: With respect to the proposed requirements related to HVAC Design and Commissioning, we propose to include all systems, regardless of their ducting. With respect to duct leakage testing, we will propose to limit the test requirement to systems with more than 10ft of supply ductwork.

Q: Why are you taking out leakage to outside duct testing when that has a direct impact on energy?

A: In most configurations of multifamily, duct leakage to "outside" is rarely to unconditioned spaces, so doesn't reflect a significant energy loss. The extra effort to conduct this test in multifamily just does not seem warranted.

Q: What is the Total Duct Leakage spec? What about ductwork within the conditioned space? Is the test procedure the same?

A: 8 CFM25/100ft2, same as currently used in Homes and MFHR. This applies to any in-unit ducted system (with more than 10 ft of total supply ductwork), regardless of location of the duct work or air handler.

Q: Total Duct Leakage in these small units are really tough. Is that being addressed?

A: The <u>same</u> allowance for small units (<1000 ft2) from the Certified Homes (80 CFM25 at final rather than 8 CFM25/100ft2) is being proposed for the new specification.

Q: How will you reconcile the proposed duct leakage requirements with that of the 2012 & 2015 IECC? Isn't the proposed duct leakage limit <u>higher</u> than what is required by the 4 CFM25/100ft2 in 2012 & 2015 IECC?

A: Yes, the proposed allowance (8 CFM25/100ft2) is higher than the 4 CFM25/100ft2 referenced in 2012/2015 IECC, however, we will not permit the exception that IECC allows, that exempts systems that are located entirely within the building thermal envelope, since that essentially covers most multifamily

apartments. If the apartment doesn't qualify for the IECC exception, and must be tested to the IECC levels in order to meet local code, the ENERGY STAR allowance would be less stringent compared to local code. We welcome feedback if you think this leakage allowance should be more stringent for those units, but the goal of this first "merge" was to limit the number of requirements that we increase the stringency levels.

Mandatory Measures-Ventilation

Q: So there is no outside venting of natural gas stoves, ovens, cooktops? Isn't ventilation to the outside required for cooking areas for Indoor AirPlus?

A: The Combustion Appliance requirements are separate from the Ventilation Rate requirements, but yes, kitchens still require exhaust that is vented to the exterior.

Q: Would introduction of outdoor air through trickle vents (balanced by exhaust fans) fit within the rules of the program?

A: Yes. That strategy is allowed by ASHRAE 62.2-2010 so it would be allowed by ENERGY STAR. ASHRAE 62.2-2010 also allows exhaust-only (without trickle vents).

Q: Do bath and kitchen exhaust fan flow rates have to be tested and confirmed?

A: Yes. In addition to the Dwelling-Unit Mechanical Ventilation Rates needing to be designed and tested to meet ASHRAE 62.2-2010, the local exhaust rates in the bathrooms and kitchens must also be designed and tested to meet ASHRAE 62.2-2010.

Mandatory Measures- DHW/Lights/Appliances

Q: Will there be different lighting power densities for senior living buildings?

A: Yes, they will be granted a higher allowance due to the visual needs of the occupants.

Process

Q: Will there be a sampling protocol?

A: Yes, ENERGY STAR would still defer to the RESNET Sampling Protocols.

Q: What about post completion benchmarking in Portfolio Manager?

A: This is still under review.

Q: Will the ESTAR checklists (ie Rater, HVAC Cx, Design Report, ect) still be required?

A: The official documentation format is still being evaluated at this time.

Q: Can a HERS rater be the verifier for the ASHRAE path?

A: Yes. We are still reviewing what the new Application for the oversight organization(s) for the ASHRAE and prescriptive options will look like. We are currently expecting that HERS raters would be allowed to do the verification, but there may be other credentials that would be allowed as well.

Q: Will there be a new specific ENERGY STAR MF Rater training?

A: Yes. Similar to the mandatory ESV3 Rater training that was developed, it is anticipated that a similar or more robust training would be developed and offered to ensure all participants share basic knowledge regarding multifamily buildings and the specific ENERGY STAR requirements.

Q: In Homes, the commissioning contractor completing the HVAC Commissioning Checklist must be credentialed by an HVAC oversight organization, like ACCA or Advanced Energy. Will this still be required? Will collection of the HVAC Commissioning Checklist be required?

A: Due to the nature of the HVAC systems often seen in multifamily, we are proposing to also allow a Licensed Professional (i.e. RA or PE) to fill out the information but then the documentation would need to be collected. If completed by a credentialed contractor, we are not proposing to collect them. We are also looking into additional options for professionals who could be permitted to complete and submit the checklist.

Q: Where would a Provider organization find the MRO application? Will a QA organization need to be an EPA recognized MRO in order to perform QA oversight for low and mid-rise projects when this change is made? (The application specifies High Rise Review)

A: Learn more about Multifamily Review Organizations (MROs) and find the application here: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_mro. This Application is only applicable for the current MFHR program. We will be creating a new Application for the new specification for oversight of the Prescriptive and ASHRAE paths. Please note, the new Application is for the organization(s) that would provide oversight of the certifications similar to how RESNET provides oversight over HERS raters.